NARRATIVE REPORT

UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE REFUGE

WINONA DISTRICT

FISCAL YEAR 1974

PERSONNEL

Jerry Leinecke (Refuge Manager).....1969-

William Thrune (Biological Aid).....Terminated 9/7/73

Mark Andersen (Biological Technician).....EOD 6/10/74

Laura Sweets (Intern).....Jan.-April 1974

United States Department of the Interior

Fish and Wildlife Service

C O N T E N T S

I. GENERAL

A. Weather Conditions

Late July and August experienced heavy rains, but most of the summer and early fall was pleasant. By November 20, much of the backwater areas had frozen over. The first significant snow fell Dec. 4, leaving seven inches: a cold trend began which climaxed at -25° on January 9. An unusual warm spell, with temperatures up to 51° began January 14 and lasted until February 3, when temperatures dropped to -15°. During the last half of February, "normal" winter temperatures resumed.

The first week in March saw temperatures in the upper 40's causing a heavy snow melt. May through much of June was plagued by frequent rains (over 12 inches of rainfall). June 10, a severe thunderstorm accompanied by hail and high winds swept the area; mudslides blocked numerous roads. June 21, another storm hit, uprooting trees, damaging homes, and terrorizing the heron rookeries. Flooded fields caused a major setback to area farmers. But when the fiscal year ended, the rain had ceased and a drought had begun.

B. Habitat Conditions

1. Water

Except for some fluctuation in October, pool levels were fairly stable throughout the summer, fall, and winter. By Nov. 20, most of the backwaters had frozen over. By late December, the channel had closed. The channel was rapidly breaking up in late January. The first tow passed Winona on March 13.

Rapid snow melt in early March caused flooding of local streams; the Trempealeau NWR entrance road was under water for about three weeks (compared to six weeks in most years). The Mississippi crested in Winona at 10.05 feet (13 feet is flood stage) on April 20. Following this the river dropped and no second crest was expected.

Heavy rains of May and early June caused a second crest of 10.54 on June 17. The Trempealeau road went under again for about ten days. Several communities along small rivers experienced their worst floods on record. Elba, Minnesota was hardest hit as the Whitewater River rampaged over its banks.. The fiscal year ended with rapid pool level drops.

2. Food and Cover

Influx of silt and sand continues to threaten (or preclude) aquatic plant growth, particularly the channel sides of Lost Island and Weaver Marsh. For the most part, however, vegetative and seed production of aquatics was fairly good. But by the end of the duck season most of the food within the Closed Areas had been depleated.

In the spring, good food supplies in the Public Hunting Areas, along with unseasonably low water levels and an early ice breakup, attracted waterfowl in unusually large numbers (see waterfowl).

After the April crest, conditions appeared ideal for marsh and shoreline nesting birds. But the second rise in the river (see water) brought peril to any unhatched nestlings.

Fall of 1973 was a good mast production year, particularly for hickory and walnut on the bluffs.

Winter snow depth was light enough to not present a severe hardship for the larger mammals, but burrowing animals were probably hard hit after the January thaw.

Despite the large deer population on Trempealeau NWR, the small junipers were not overly browsed and a healthy herd survived the winter.

II. WILDLIFE

A. Migratory Birds

1. Ducks

An estimated 7250 ducks were in the district in the beginning of the fiscal year. Over half were wood ducks. Other species included about 2100 mallards, 200 black, 425 BWT, 650 Hooded mergansers plus shovelers, green-winged teal, and wigeon.

Blue-winged teal peaked the second week of September at 2795 (about double that of the previous year). Wigeon peaked the third week in September at 2950. By the first week in October, all species common to the flyway were in, with 12,200 ducks in the district.

Major movements of larger divers occurred the week ending October 13. Total duck population was highest the week of October 20 at over 28,700 birds. Of these 10,000 were canvasback. Ring-necked peaked at 4200, scaup at 3200, and redhead at 1000. Pintail use days increased over the previous year (Sept. - Dec.) from 30,170 to 104,240. Pintail peaked at 2550 compared to 800 the previous year. Mallards peaked at 5300 the first week in November, blacks peaked at 1850.

Most wood duck had moved out by the end of October, as had wigeon. By the end of December there were 2550 ducks left on the district, of which 2000 were common mergansers.

Total duck use days for September through December was 1,197,080, an increase of 33% from the previous year. Mallards accounted for 21.1% of this use, canvasback, 15.5%, wood duck, 10%, and mergansers, 8.5%, followed by ring-necked, pintail, scaup and black ducks.

Spring did not bring the usual flooding of the Mississippi; backwaters opened early, and there was enough accessible food to attract birds to the river. The period of January through April saw a 190% increase in duck use days over the previous year.

All species common to the flyway had arrived by the third week in March. Greatest numbers were present the week ending April 13, when there were 163,000 ducks.

Mallards peaked at 26,300, wood duck, 15,900, ring-necked, 30,000, canvasback, 23,500, and scaup, 40,000; peaks for these species the previous year were 8000, 5250, 2700, 10950, and 4700 respectively. Most other species were also up substantially.

By the end of May, there were an estimated 18,125 ducks on the district, mostly summer residents.

Number of broods observed on the 1973 fall brood count was down from the previous year but brood size was up. Average brood size for wood duck was 7.6 and for mallard was 5.95. Twenty three wood duck and 13 mallard broods were observed.

2. Geese

In the fall, Canada geese peaked at 678 the week ending October 20. Snow and blue geese appeared in large numbers only the week ending October 20, when there were 800 (compared to a high of 25 the previous fall). White-fronted peaked at 15.

In the spring, Canada geese peaked at 6250 (compared to 395 of 1973). Snows and blues peaked at 150 and white-fronted at 25.

What were believed to be three barnacled geese were observed at Weaver marsh the week ending April 3.

3. Swans

Whistling swan began arriving the week ending October 13, and peaked at 2580 (compared to 7770 the previous fall).

Dr. William Sladen of John Hopkins University again returned to follow-up on his swan migration study. With the assistance of Dr. Vose and students from St. Mary's College plus refuge personnel, six birds were collared, two of which received radios. Despite the cold spell and nearly complete freeze over, the first radioed swan did not depart until December 17. At that time there were still 300 left in the district. The swan's flight was tracked by airplane.

Swans returned the first week in March and peaked at 10,000 (compared to 375 in 1973). All but eight had left by the last week in April. One was observed until the end of June.

4. Coot, Rails, and Gallinules

Coot: About 200 breeding birds are here in the summer. Fall peak was 50,000 (30,000 the previous year). Spring peak was 24,000 (10,000 in 1973).

Rails: Although Virginia and king rails have been reported in previous years, none were observed this year. The sora rail is often heard and seldom seen. Breeding population is estimated at 1000.

Gallinules: Common gallinules can be observed throughout the summer from the Trempealeau lodge. Resident population for the district was estimated at 40. No spring or fall increases have been noted.

5. Other Water Birds

Egrets: Great egrets nest in three known rookeries. The rookery in the West Newton area was discovered by air in the winter, but no ground check has been made. Peak number of egrets was 2000 birds. Production was estimated at 475 reaching flight stage.

In August, two cattle egrets were observed in an off-refuge field in the Trempealeau area.

Herons and Bitterns: Great blue herons, more common than the egrets, nest in the same rookeries. Peak population was estimated at 3400, production at 975. There is no record of a detailed nest check having been made this fiscal year.

Green heron are frequently seen; their greatest number was estimated at 2000. Up to an estimated 60 black-crowned night herons use the district, but rookeries have not been located in recent years. Sightings of yellow-crowned night herons were limited to a few isolated observations in the summer and following spring. It is not known if they nest on the district.

American bittern are seen occasionally, particularly in the spring around Trempealeau NWR. Their highest number was estimated at 500. Up to 210 least bitterns also used the district.

Grebes: A peak of 175 horned grebes and 200 eared grebes were reported for the week ending April 20. These species are normally rare to the area.

Only a handfull of pied-billed grebes spend the summer. Peaks were 800 for fall and 1000 for spring.

Cormorants: No double-crested cormorant rookeries have been located in recent years, although there may be one somewhere on the Delta Fish and Fur Farm. Resident population was estimated at 25. Peak numbers were 85 for fall and 200 for spring.

Pelicans: Two white pelicans were observed in the Weaver - Lost Island area during the last two weeks in September. None were seen the previous year.

to Other Birds

Morning Doves: Morning doves peaked at 800 the week of August 12. This number includes the estimated 400 young produced. Only a few of these birds winter on the refuge.

B. Upland Game Birds:

Although there are no know wild turkey on the district, Minnesota City residents tell of several flocks in the near-by bluffs. Ruffed grouse are commonly seen on the higher islands and at Trempealeau refuge.

The district has very little pheasant or quail habitat except for the Trempealeau refuge (where they are rarely seen wild) and a few scattered areas.

The Associated Conservation Clubs of Trempealeau County maintain pheasant pens on Trempealeau NWR for release throughout the county in the fall.

C. Big Game

White-tailed deer: Hunting pressure pushes deer into the Trempealeau NWR where over 100 may winter. The district manager supplemented winter food with corn provided by the Wisconsin DNR. Deer came through the winter very well and twinning was high in the spring.

On the district, the greatest number of deer present was estimated at 675. Production was 200 and hunter kill, about 65.

D. Fur Animals, Predators, Rodents, and Other Mammals

Despite trapper complaints of decreased muskrat populations and increased trapper competition due to high prices, total take was about the same -- See Fur Harvest. Spring mortality was lower than in most years, for the river never reached flood stage. Most spring mortality occurred during the June crest.

Short tail weasel (listed on the hypothetical mammals list) have been observed along the road to the Alma Marina.

In 1973, red fox were a common sight, but mange was prevalent. Cubs were reportedly seen frequently along road sides, behaving strangely and no great fear of man. But local game wardens do not recall any rabies epidemic. In 1974, it was very unusual to see a fox.

E. Hawks, Eagles, Owls, etc.

Hawks: Red-tailed hawks are common year-round. Peak number was 300 the week ending November 3. Marsh and sparrow hawks are the next most populous, peaking at 135 and 200 respectively. Other hawks have very small numbers throughout most of the year. Rough-legged, broad-winged, and red-shouldered hawks all peaked the week ending September 29, when their numbers approximated 50, 35, and 55 respectively.

Eagles: An immature bald eagle was observed the week ending July 14; one was seen the week ending August 4. Peak number for the "fall" migration occurred on December 15, when there were 72 adults and 23 immature. Eagles winter on the district. March 30, there were 72 adult and 23 immature. The week endingApril 6, there were 25 adults and 70 immature.

A citizen reported that a pair of what he thought were golden eagles were nesting in a bluff below Minnesota City. This has not been confirmed one way or the other. Goldens had traditionally nested near there until the pair was shot several years ago. It may be that the progeny has returned.

Owls: One snowy owl was observed throughout the month of January in Winona. Great horned owls and barred owls are the most numerous, with peaks near 150 for each, followed by screech, saw-whet, long and short-eared owls.

Crows: Crows are abundant in the area, with several hundred wintering on the district. It is not known how seriously crows depredate marsh and water bird nests in the area.

Vultures: Turkey vultures had left the area by the first week in November and began arriving in mid March. Peak number was 50 during the week ending August 25.

F. Other Birds

Osprey are occasionally seen in the river valley from March through early October. Their highest number known was six during the week ending September 1.

G. Fish

The number of commercial fishermen operating has declined in recent years. Still, over 2½ million pounds of fish are annually taken from the district. Most of this is taken by seines and gill nets. Many small operators use set lines. Carp make up about 60% of the take; buffalo, sheepshead, and catfish make up 36%.

H. Reptiles

The massasauga rattlesnake is found in the Nelson-Trevino bottoms, and the adjoining state-owned Tiffiny bottoms. Wisconsin's rattlesnake bounty (directed at the timber rattler) was increased from $3.00 to $5.00. In addition to the several hundred massasaugas taken by bounty hunters, a researcher from the U. of Minnesota, who was studying the snake's food habits, collected over 300 without informing the state in advance. Because the snakes are forced onto the relatively small areas of land during high water, they are vulnerable. The snake is expected to become placed on Wisconsin's endangered list.

I. Disease

See Fur Animals.

III. PHYSICAL DEVELOPMENT AND MAINTENANCE

A. Physical Development

Reed Construction Co. of New Brighton, Mn, erected the vault latrines at Pontoon Slough Landing. Bennett and Sons supplied the backfill. The latrines required frequent pumping and it appeared that what was intended as a convenience for sportsman had become a major highway rest stop. When it was discovered that the parking lot run-off was draining into the vault, an asphalt barrier solved the problem.

Servicemen from Winona Heating and Ventilation installed roof and eve vents in the Trempealeau residence. Polashek Electric upgraded the wiring and lighting system of the residence. The electric cooperative put in underground service. The residence septic tank was pumped and serviced at the request of the RO, who advised that tanks should be serviced one year after installation. Insulation was also added to the attic.

An interpretive sign explaining the oak-wilt clearing and a headquarters sign was erected at Trempealeau NWR. A main entrance sign was installed along Highway 35 with approval of the highway dept; the sign was later removed because the letters were too small and the proportion contrary to the new sign handbook.

The Army Reserves of Onalaska, at our request, took on the construction of the interpretive auto trail at Trempealeau. The first heavy trucks were working on November 10th. Working only on selected weekends, they had just less than half completed when they quit for the winter. Construction resumed June 22nd.

The district manager spread gravel on the headquarters driveway and parking lot.

Graveling of the auto tour road on Trempealeau NWR, recently constructed by the Army Reserves of Onalaska.

Buoys for the closed area line in Winona pool were constructed of surplus machine gun cannisters.

Closed area buoys for deep water sections were made for the Winona and LaCrosse districts. The buoys were made from machine gun canisters, ballasted with gravel and filled with polystyrene, with signs attached to the top. A 12 foot cable anchored them to concrete blocks. Most of them floated well, and the blaze orange signs were visible for considerable distance. However, the buoys were awkward and must be removed annually or the ice will pull them.

An exhibit display case was installed at Trempealeau NWR.

B. Plantings:

None

C. Collections and Reciepts:

Grain - Approximately 275 bushels of shelled corn was recieved from the Minnsota DNR for use in the wood duck banding program. Ear corn was recieved from the Wisconsin DNR(amount unknown) for use in a small deer feeding program on the refuge. This is primarily to attract the deer to good public viewing areas. A small amount of cleanings from the LaCrosse Milling Co. at Cockrane was recieved for small bird feeding.

Specimens: One great horned owl, two red-tailed hawks, a rose-breasted grosbeak, and a ring-billed gull were donated to St. Mary's College in Winona.

D. Control of Vegetation;

Elm trees on our land within the limits of Alma, Wis, were inspected for Dutch Elm Disease by the area forester, who confirmed that the trees were almost dead. The disease has been enroaching on the area for almost two years. Many people are not happy that the river bottoms contain such a vast amount of unmanaged elm trees. Black locust was brushed along the Trempealeau NWR entrance road.

The final effort was made to clear lands for control of the oak-wilt fungus. Lack of funds terminated the project with only a few stands of oak remaining. Only partial burning of a few of the many slash piles has been accomplished.

E. Planned Burning:

Slash piles along the north sand road of Trempealeau NWR were burned in March with the cooperation of the area forester and the farmer contracted for the oak-wilt control.

None of the slated prescribed burning was done, due to weather conditions and the unavailability of the area forester.

These aerials show the majority of the Trempealeau NWR. The upper photo shows the area of the new tour road. The road runs along the slough in the foreground and around the grassy area in the center. Then toward the trees on the right edge.
The lower photo show the large oak-wilt control area on the northwest portion on the refuge. Large slash piles still remain. Hopefully, a prescribed burning program will convert this area into prairie.

F. Fires:

One slash pile, mentioned above, went out of control and burned about four acres of the oak-wilt control area where a prescribed burn was scheduled anyway.

IV. RESOURCE MANAGEMENT

A. Grazing:

Three grazing permits were issued for the period of June 1st to October 1st, 1974. Since refuge lands are contigious with the private land on these grazed areas, each animal is estimated to be using the refuge about one-tenth of the time grazed. A total of 162 head were grazed, utilizating 74.6 AUM's. At a cost of $2.00/AUM, refuge reciepts totaled $149.00.

B. Haying:

None

C. Fur Harvest:

High prices brought a lot of trappers out of the woodwork. Of the 223 trappers reporting, 30,884 muskrats were taken for a value of 79,747.92 dollars. This was an average of 138.5 animals per trapper and $2.58 per muskrat. Thirty-Six per cent were taken in pool 4, 34% in pool 5, 22% in pool 5A, and 7% in pool 6.

Twenty mink were reported at an average price of $21.56, one opossum at $1.00, one fox at $28.00, and 12 raccoon at an average price of $10.17. Fox and Raccoon are trapped the year around and some trappers may forget to include these, especially if most of their trapping is done off the refuge.

The refuge was colosed to beaver trapping in Wisconsin, which had been heavily trapped for two years. Minnesotans had their turn for the first time in two years. Twenty-eight trappers tried their luck and 162 beaver were taken at an average pelt price of $14.53. Of these, 15% were taken in pool 4, 27 % in pool 5, 40% in pool 5A, and 18% in pool 6.

Total reported return to trappers was $82,000.00.

D. Timber Removal:

A permit was issued for the removal of approximately 153 MBF of maple, cottonwood, elm, willow, birch, and ash saw timber, and approximately 220 cords of mixed hardwood pulpwood from the Newton Shoot area. The refuge revenue was $3350.00.

Four firewood permits were issued to cut dead and down wood wood for personal use from the oak-wilt control area of Trempleau

NWR. Cost was $2.50 a cord.

A timber tresspass case involved the cutting of a large cottonwood and other trees at Verchota Landing. The logger had recieved false authorization from a representative of the Minnesota City Boat Club.

E. Commercial Fishing:

One permit($100.00) for a commercial fish holding pond remains in effect. For other information, see Wildlife-Fish.

F. Other Uses:

Special Use permits were issued to the following: Dr. Rory Vose (No charge) for a permanent blind in Weaver marsh, for studing swans, Minnesota Boat Club($25.00), The Associated Conservation Clup of Trempealeau County (No Charge) for pheasant rearing pens on Trempealeau NWR. In addition, 153 refuge permits($10.00 each per year), and a similiar amount of Corps of Engineers permits are in effect, mostly for maintaining boat docks and slips and/or steps to the water. These are inspected annually for trespass structures.

V. FIELD STUDIES OR APPLIED RESEARCH

A. Banding:

Wood duck banding ran from July 18th to August 18th, with 79 birds banded. Swim-in traps were placed on the Delta Fish and Fur Farm and cannon nets at the Nelson Landing were used.

VI

VII. PUBLIC RELATIONS

A. Recreational Use:

An estimated 330,000 visits were made to the refuge in FY 74. This was up from the 245,000 visits the year before. Principal use was by fishermen, who contributed over 138,000 visits and 683,000 activity hours. Non-wildlife oriented visits continued to be high--with 88,000 visits for recreational boating, 37,000 for camping, 64,000 for pinicking, and 46,800 for swimming.

Visits for wildlife observation were estimated at over 16,500, and there were over 30,800 involving wildlife-wildlands appreciation.

B. Refuge Visitors:

Regional Supervisor, Gordon Hansen, Field Solicitor, Elmer Nitschke, and Wilderness Specialist, Les Dundas were given a tour into the Nelson-Trevino proposed Wilderness Area.

Don Riley, regional office photographer, toured the district to shoot photos for possible use in refuge leaflets.

Environment Education Consultant, Ed Landin, his assistant Katy Ligare, EE specialist, Peggy Charles, Jack Toll of Mark Twain NWR, Bob Personius of Horicon NWR, and Bill McCoy of Sherburne NWR toured Trempealeau NWR in conjunction with a regional Enviromental Education meeting and local teacher's workshop.

C. Refuge Participation:

Considerable time was spent on interpretive and enviromental education programs, despite the fact that a few requests could not be met due to mileage restrictions. Programs included films and slide programs, nature walks, birding trips, and marsh and prairie ecology tours. Groups ranged from college to elementary students, businessmen, Lions Clubs and Sportsmen to homemakers and cub scouts. During wildlife week alone, over 5000 persons attended the 21 presentations to school groups and various organizations.

The district manager helped with the promotion of the Fiftieth Anniversary of the Upper Mississippi River Wild Life and Fish Refuge, through radio talk shows and appearances of Teleprompter TV.

Enviromental Education really got off the ground in 1974. An intern was stationed at Trempealeau to develop winter EE activitys. Regional EE coordinators made several trips to help organize the EE direction. Five EE teacher workshops were held in addition to a lot of leg work to various schools. All schools attending the workshops returned with their students. LaCrosse and Winona newspapers carried articles on the EE activities. Mid-May to mid-June was saturated with EE and interpretive programs at the Trempealeau NWR. Fortunately, the public use specialist at Winona took much of the load.

The district manager assisted with teaching a mini-unit course in conservation at the Alma High School.

Enviromental Education Studies at Trempealeau NWR. Teacher workshops resulted in later student studies in vegetative transects, cover maping, soil and vegetation studies, wildlife census, etc. Blind-folded students in lower photo are learning to identify objects using senses other than sight.

Four, one evening, duck identification nights were presented and two hunter safety courses were conducted. In all, sixty programs of various kinds were presented.

D. Hunting:

Refuge personell and game managers of the west-central district of the Wisconsin DNR joined in a cooperative effort to sample the 1973 duck harvest on the Mississippi River. The statistical survey was conducted on the Wisconsin side from the Nelson dike to Dam #9. An estimated 15,480 waterfowl hunter visits were made on the district. An estimated 15,800 ducks were bagged. Kill by species was probably close to that found in the survey--40% mallards, 30% blue-winged teal, 9% wood duck, and 7.5% wigeon, followed by green-winged teal, pintail, ring-necked duck, gadwall, and Black duck. Not being on the point system, Minnesota probably had a higher percentage of wood ducks. An estimated 3140 ducks were unretrieved.

Hunting pressure for other species is not great. Estimated number of visits were 73 for other migratory birds, 80 for upland game, 345 for deer bow hunting, and 405 for firearms deer hunting. An estimated 65 deer were taken from the bottoms.

E. Violations:

Apprentions by Bureau personell of violators on the Winona district were as follows: 22 littering, one unsafe boating, one boat moorage in a prohibited area, 10 parking in prohibited area, two fish snagging, one trapping in closed area, 4 hunting in a closed area, two shooting before noon opening(waterfowl), one taking waterfowl before noon opening, one shooting after shooting hours, two illegal possesion of canvasbacks, and three for transporting loaded and uncased firearms in a motor vehicle.

VII. ITEMS OF INTEREST

General:

Dairyland Power Company has proposed a land exchange for refuge lands immediatelly south of their plant site atdAlma, Wisconsin. They would like to have approximately 300 acres of land for fly ash disposal and railroad track construction. The proposal is still under consideration and details have not been finalized.

An EIS was drafted by the Corps of Engineers on the 9 foot navigation channel. Most of the work was done by consultant firms or agencys.

Personell:

There were no personell changes during FY 73. Temporary personell were hired during the summer months.

Safety:

There were no reportable accidents at the district in 1973. Safety was discussed at the regular staff meetings.

Credits:

This report was written by assistant manager, Hilma Volk, with minor editing by district manager Cornelius. Typing was a joint effort. Photographs were selected from the refuge files.

date:_____ submitted by: Stanley Cornelius

Stanley Cornelius
District Manager

date:_____ approved by:_____

Wayne Gueswel
Refuge Manager